



Special Issue on Quantum Dot Research

Call for Papers

Quantum dot is a very active research area, and is one of the most promising approaches which might lead to the realization of practical quantum computers. Quantum dots provide semiconductor-based implementation for qubits, i.e., computing unit for quantum computer. More interestingly, quantum dots also have significant applications perspective such as lasers, solar cells, transistors, LEDs, waveguide amplifiers, luminescent markers, etc. Numerous papers have been published, and a considerable number of patents have been filed related to the optical application of quantum dots. The potential industrial and commercialized applications of quantum dot have drawn lots of attention from researchers in the industrial sectors of information and communications technology, health and medical care, environment, safety & security, etc. There are different ways to generate quantum dots based on the corresponding method of quantum confinement.

The issue on "Quantum Dot Research" will focus on both theoretical and experimental research frontiers. Topics covered include but not limited to:

- quantum dot
- quantum well
- quantum wire
- quantum transistor
- quantum dot laser
- quantum dot luminescence
- quantum dot display
- quantum dot solar cell
- quantum dot photodetector
- nanocrystal
- semiconductor nanodevice
- semiconductor nanostructures
- semiconductor nanotechnology
- semiconductor nanoparticles
- semiconductor single electron transistor
- programmable matter
- STM and quantum dot

In this special issue, we intend to invite front-line researchers and authors to submit original research and review articles on Quantum Dot Research.

Authors should read over the journal's [Author's Guidelines](#) carefully before submission. Prospective authors should submit an electronic copy of their complete manuscript through the journal [Paper Submission System](#).



Please kindly notice that the “Special Issue” under your manuscript title is supposed to be specified and the research field “**Special Issue —Quantum Dot Research**” should be chosen during your submission.

According to the following timetable:

Manuscript Due	September 12th, 2013
Publication Date	November 2013

Guest Editor

Dr. Yohannes Abate

California State University, USA

For further questions or inquiries

Please contact Editorial Assistant at

jmp@scirp.org